

VERSION WITH MARKINGS TO SHOW CHANGES MADESPECIFICATION:

Specification at page 1, line 4:

THIS APPLICATION IS A CONTINUATION APPLICATION OF APPLICATION SERIAL NO. 09/586,915, FILED JUNE 5, 2000, WHICH IS A CONTINUATION APPLICATION OF APPLICATION SERIAL NO. 08/945,629, FILED APRIL 23, 1998, WHICH IS BASED UPON PCT/JP96/01123 FILED APRIL 25, 1996.

CLAIMS:

Claims 1-23 have been canceled.

Claim 24 has been added.

09/586,915

WHAT IS CLAIMED:

1. (Amended) A data transmitting apparatus, wherein
said data transmitting apparatus is a transmitting apparatus
acquiring a part of the bandwidth of a communication medium before
transmission and transmit it and comprising:

bandwidth detection means for detecting a bandwidth of data
inputted to said transmitting apparatus;

necessary bandwidth calculation means for calculating a
necessary bandwidth for said communication medium from said bandwidth
outputted from said bandwidth detection means;

transmission condition judge means for comparing an acquired
bandwidth acquired from said communication medium with said necessary
bandwidth outputted from said necessary bandwidth calculation means and
judging if said necessary bandwidth exceeds said acquired bandwidth;

transmission control means for outputting said data only while
the judge result outputted from said transmission condition judge means
indicates that said necessary bandwidth does not exceed said acquired
bandwidth and stopping said data output while the judge result outputted
from said transmission condition judge means indicates that said necessary
bandwidth exceeds said acquired bandwidth; and

transmission means for transmitting said data outputted from
said transmission control means to said communication medium.

2. (Amended) A data transmitting apparatus as recited in claim 1,
comprising:

bandwidth information adding means for adding a bandwidth
outputted from said bandwidth detection means to the data outputted from
said transmission control means as bandwidth information and outputting
only said bandwidth information while said data is not supplied from said
transmission control means; and wherein

said transmission means transmits said data added with said
bandwidth information outputted from said bandwidth information adding

means or said bandwidth information to said communication medium.

3. (Amended) A data receiving apparatus comprising:

5 reception means for occupying a part of the bandwidth of a communication medium and for receiving transmission information transmitted only while the bandwidth of data to be transmitted does not exceed the acquired bandwidth and stopped to transmit said data while it is indicated that said necessary bandwidth exceeds said acquired bandwidth, from said communication medium;

10 transmission stop detection means for inputting said data received at said reception means and detecting that said transmitting apparatus stops transmission by detecting that said data does not arrive for a designated period; and

15 processing means for processing to correspond according to the detection result detected at said transmission stop detection means.

4. A data receiving apparatus as recited in claim 3,
wherein:

20 said processing means directs to stop a recording action to a recording apparatus to record the received data when said transmission stop detection means detects that said transmitting apparatus stops transmission.

25 5. A data receiving apparatus as recited in claim 3,
wherein:

said processing means directs to stop a reproducing action to a reproducing apparatus to reproduce the received data when said transmission stop detection means detects that said transmitting apparatus stops transmission.

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6. (Amended) A data receiving apparatus comprising:

reception means for receiving said data sent from a transmitting

apparatus acquiring a part of the bandwidth of a communication medium before transmission, transmitting said data added with bandwidth information while the bandwidth of data to be transmitted does not exceed the acquired bandwidth and receiving transmission information which stops
 5 outputting said data added with the bandwidth information when said data bandwidth exceeds the acquired bandwidth and transmits only said bandwidth information, from said communication medium;

transmission stop detection means for inputting said data received at said reception means and detecting that said transmitting
 10 apparatus stops transmission of said data by detecting that said data does not arrive for a designated period and only bandwidth information arrives;

bandwidth information separation means for inputting said data received at said reception means and added with said bandwidth information and separating and outputting said bandwidth information
 15 added from said data; and

processing means for processing to correspond according to the detection result detected at said transmission stop detection means and at least one of said bandwidth information separated at said bandwidth
 20 information separation means.

7. A data receiving apparatus as recited in claim 6,
 wherein:

said processing means directs to stop a recording action to a recording apparatus to record the received data when said transmission stop
 25 detection means detects that said transmitting apparatus stops transmission.

8. A data receiving apparatus as recited in claim 6,
 wherein:

said processing means directs to stop a reproducing action to a reproducing apparatus to reproduce the received data when said
 30 transmission stop detection means detects that said transmitting apparatus

15. (Deleted)

16. (Amended) A data transmitting apparatus comprising:
 measurement means for measuring a data size arriving during a
 5 designated fixed period;
 bandwidth determination means for determining a transmission
 bandwidth from the data size measured at said measurement means; and
 transmission means for transmitting according to the
 transmission bandwidth determined at said bandwidth determination
 10 means; and wherein
 said bandwidth determination means adds a data size with a
 designated rate for the data size measure at said measurement means and
 determines a transmission bandwidth according to the data size obtained by
 said addition.

17. (Amended) A data transmitting apparatus comprising:
 measurement means for measuring a data size arriving during a
 designated fixed period;
 bandwidth determination means for determining a transmission
 20 bandwidth from the data size measured at said measurement means; and
 transmission means for transmitting according to the
 transmission bandwidth determined at said bandwidth determination
 means; and
 wherein
 25 said measurement means measures a data size by counting the
 number of packets having a fixed length arriving during a designated fixed
 period.

18. A data transmitting apparatus comprising:
 30 judge means for judging if the transmission packets which a
 receiving apparatus receives from a transmission route passes the timing to
 be outputted from said receiving apparatus;
 a counter for counting up the value when a transmitting
 apparatus sends one of said transmission packets and counting down the
 35 value when said judge means judges that each of said transmission packets
 passes the timing to be outputted from said receiving apparatus;
 determination means for determining a transmission timing of
 each of said transmission packets so that said counted value does not exceed
 a fixed value; and
 40 transmission means for transmitting said data according to the
 transmission timing determined at said determination means.

19. A data transmitting apparatus comprising:
 transmission time stamp for generating transmission time stamp